

Ship Strike Reduction Strategy

NOAA Fisheries

This paper lays out a ship strike reduction strategy to reduce the threat of ship strikes to North Atlantic right whales. The Strategy consists of five elements: (1) Establishment of new operational measures for the shipping industry, including consideration of routing measures and speed restrictions; (2) Negotiation of a Right Whale Conservation Agreement with the Canadian Government to address the issues of ship strikes; (3) Development and implementation of ship strike education and outreach programs; (4) Initiation of Section 7 consultations under the Endangered Species Act with all federal agencies which have vessels operating in waters inhabited by right whales; and (5) Continuation of ongoing research and conservation activities, including with regard to technological developments, that may assist in addressing this issue.

Certain details of the Strategy are still under development. Specifics such as speed limits and the final boundaries of some regulatory areas will be arrived at through further biological analyses, NEPA analyses, PARS (Port Access Route Study) analyses, interagency review and comment, public comment, and the rule-making process.

I. Operational Measures

Operational measures include possible vessel routing changes and/or speed restrictions, and analyses related to them. The implementation of these measures are to be enacted regionally, because whale occurrence and distribution differs in each region, as does the navigational requirements, including the waters off the (a) U.S. Southeast, (b) the U.S. Mid-Atlantic, and (c) U.S. Northeast. The description of these measures are set forth, regionally, as (a) specific times in which measures are in effect, (b) specific boundaries in which measures are in effect, (a and b) which are narrowly defined, and (c) specific operational measures proposed.

All operational measures will apply to vessels 65 feet and greater.

A. *Southeast Coast of the United States (SEUS)*

Times: December 1st through March 31st

Area: This area is irregular in shape: larger at the northern end than the southern. (See attached chart.)

The northernmost boundary is coterminous with the northernmost boundary of mandatory ship reporting system (MSR) and the southern boundary of this larger section is 29 deg 45 min, with the distance offshore formed by a horizontal line

drawn between the two at 81 deg longitude (which is between 15-20 miles offshore), and smaller at the southern end, with the southernmost boundary that of the southernmost boundary of the critical habitat, with a distance offshore of five miles.

Operational Measures:

- work in partnership with the U.S. Coast Guard to conduct a Port Access Route Study (PARS) for the ports of Jacksonville, Fernandina, and Brunswick. The intent of the PARS is to reduce the confluence of right whales and ships in this area. If warranted and so indicated by the PARS analysis, establish mandatory traffic separation routes with the greatest possibility of reducing the risk of collisions with whales.
- impose uniform speed restrictions in those lanes which may be lifted if there are “no” whales present in the area (the criteria for this have yet to be determined, but an example might be if no whales are observed during two consecutive aircraft surveys flown under good sighting conditions within a period of at least five days)
- develop an understanding with operators of vessels (ships, large recreational vessels, tugs and barges, etc.) which primarily transit along the coast locally and between ports. The understanding would be that vessels use the designated traffic lanes or avoid transiting the area to the maximum extent practicable and, for those that do not use the lanes or avoid the area, impose a uniform speed restriction.

B. *United States Mid-Atlantic*

Times: A set of uniform, rolling dates based on the historical data regarding the movement of right whales through this region (*interim pending further analysis and modeling*):

- the area delineated to the south and east of Block Island Sound (approximate reference points: Montauk Point and the western end of Martha's Vineyard): March & April; September & October
- Ports of New York/New Jersey: Feb, March, April; September & October*
- Delaware Bay (Ports of Philadelphia): Feb, March, April?*; October, November, December*
- Entrance to the Chesapeake Bay: February, March & April ?*);

November & December*

- Ports of Morehead City and Beaufort, NC: December--April*
- Port of Wilmington, NC: December--April*
- Port of Georgetown, SC: October--April*
- Port of Charleston: October--April*
- Port of Savannah: November--April*

*Precise start and stop dates (e.g., 1 November--15 January) need to be developed.

Area: (All areas proposed are interim pending further analysis and modeling).

- the area delineated to the south and east of Block Island Sound (approximate reference points: Montauk Point and the western end of Martha's Vineyard): 20--30nm
- Ports of New York/New Jersey: 30 nm
- Delaware Bay (Ports of Philadelphia): 20-30nm*
- Entrance to the Chesapeake Bay: 30nm
- Ports of Morehead City and Beaufort, NC: 20-25nm*
- Port of Wilmington, NC: 20nm
- Port of Georgetown, SC: 20--30nm* (this needs to be examined closely as migrating whales may be pushed further offshore due to shoals north of Georgetown, SC at Cape Fear)
- Port of Charleston: 20-25nm*
- Port of Savannah: 25nm

* Precise radii need to be developed.

Operational Measures:

- Establish a uniform speed restriction within 20-40 miles in the approaches of (1) an area delineated to the south and east of Block Island Sound, (2) the Ports of New York/New Jersey, (3) the Delaware Bay (Ports of Philadelphia), (4) the entrance to the Chesapeake Bay (Ports of Hampton Roads, Richmond, VA, and Baltimore, MD), (5) the ports of Morehead City and Beaufort, NC, (6) the port of Wilmington, NC, (7) the port of Georgetown, SC, (8) the Port of Charleston, SC, and (9) the Port of Savannah.

C. *Northeast Coast of the United States*

(1) Cape Cod Bay

Time: January 1st - April 30th

Area: The entire Cape Cod Bay including the Cape Cod Bay critical habitat and the area south of a straight line formed from the northeast corner of critical habitat, through the northwest corner of the critical habitat, and continuing to the shoreline. (See attached chart.)

Operational Measures:

- Work in partnership with the U.S. Coast Guard to institute a port access route study (PARS) for Cape Cod Bay and to establish routing measures based on the PARS. The elements that should be considered in this PARS are the following: (1) all efforts should be made to reduce the confluence between right whales and ships in this area, (2) the preferred means to accomplish this appears to be through mandating that ships not enter the area coterminous with critical habitat, (3) for those ships entering and leaving the Port of Provincetown from Cape Cod Canal or from the north, designated lanes should be established to minimize the travel distance through this area, and (4) such lanes should be broad enough to allow ships to route around any whales found in the lanes.
- Formalize, through a memorandum of understanding (MOU), the ongoing relationship with the Corps of Engineers in providing notices to mariners when they enter Cape Cod Bay from the Canal or from the north, and to traffic south bound out of the Canal when whales are sighted south of the NEUS area, e.g., off Block Island and Long Island. In particular, the MOU should address the provision of notices to tug and barge traffic, which comprises the majority of traffic using the Cape Cod Canal.
- Establish uniform speed restrictions within the designated lanes into Provincetown, which may be lifted in those rare years when there are “no” whales present in this area (the criteria for this have yet to be determined).

(2) Off Race Point

Time: April 1st - May 15th

Area: This area is a carefully delineated box, with the latitude and longitude as follows:

70.50 W, 42.50 N
69.90 W, 42.50 N
69.90 W, 42.00 N

70.03 W, 42.00 N
follow Mass Coast to
70.17 W, 42.08 N
70.25 W, 42.20 N
70.50 W, 42.20 N

Operational Measures:

- Establish a uniform speed restriction in the operation zone, or as an alternative, mariners route around this area.

(3) Great South Channel

Time: April 1st - July 31st

Area: This area is a carefully delineated box, with the latitude and longitude as follows:

| | |
|----------|--|
| 69.03W | 41.00N (southern corner) |
| 67.08.4W | 42.08.4N (southern intersection with Hague Line) |
| 67.27W | 42.50N (Northern intersection with Hague Line) |
| 69.00W | 42.30N |
| 69.00W | 42.00N |
| 69.43.8W | 42.00N (return to first point) |

Operational Measures:

- This is a combination measure of: (1) the establishment of an International Maritime Organization (IMO)-adopted area to be avoided (ATBA) adjacent to, and east of, the traffic separation scheme (TSS) and applicable to ships 300 gross tons and above and (2) for all vessels that are under 300 gross tons and over 65 feet (including fishing vessels), speed restrictions within the ATBA and the critical habitat which lies to the southwest of the TSS.

(4) Gulf of Maine

Time: Year-round

Area: Waters under U.S. jurisdiction to the north of the other management areas for Cape Cod Bay and Off Race Point.

Operational Measures: Dynamic area management (until such time that ongoing

broad scale aerial surveys in the northeast provide additional right whale distributional data to inform seasonal management or other measures).

D. *All Areas*

- ***Dynamic management:*** Establish a mechanism whereby if a certain number whales [to be determined] are sighted in an area outside of the time for, or beyond the area of, the operation of the measures, a precautionary area may be established around the whales and, keeping in mind navigation safety considerations, ships may be directed either to divert around them or reduce their speed to a mandatory limit and proceed with caution.

II. A Bi-lateral Agreement. NOAA Fisheries should work closely with the Department of State to negotiate a bi-lateral Conservation Agreement with Canada to enhance the protection of right whales from ship strikes. Such an Agreement could include provisions that ships, as a condition of port entry, comply with the measures agreed to by the United States and Canada.

III. Education and Outreach

The Strategy includes aggressive development and prompt implementation of a comprehensive education and outreach program for mariners which highlights the severity of the ship strike problem and provides steps that can be taken by the industry to reduce the threat of ship strikes. Some operational measures may take months/years to approve and implement, but an education and outreach program will not be controversial and can and should be developed and implemented as soon as possible. Such a program would:

- provide training, on a programmatic level, for all port pilots throughout the range of the right whale;
- provide educational materials and an ongoing dialog with all commercial shipping ports along the east coast from Maine to Port Canaveral, Florida;
- provide educational materials and an ongoing dialog with non-commercial vessels and the tug and barge industry;
- ensure that the U.S. Coast Pilots are periodically updated with regard to measures and guidance for mariners to avoid ship strikes;
- provide educational materials, briefings and ongoing dialog to the Merchant Mariner Personnel Advisory Committee and a mechanism for

inserting and updating information on ship strikes into the U.S. Coast Guard's regulations which implement the International Safety Management Code; and

- ensure continued efforts to work with the U.S. Coast Guard to expand the use of NAVTEX as a means to issue periodic notices to mariners regarding ship strikes.

IV. Endangered Species Act Section 7 Consultations

Endangered Species Act section 7 consultations will play an important role in the evaluation of and implementation of this Strategy. Although consultations have been done on some vessel operations (noted in "Section I", above), further consultations are needed on activities of all Federal agencies that operate vessels in waters inhabited by right whales, as well as the Strategy itself. Consultations are expected to take two basic forms:

- (a) those with the "action agency" implementing the Strategy described here; and
- (b) consultations with federal agencies that operate vessels in or near right whale habitat.

A determination must be made regarding whether the implementing agency will be the U.S. Coast Guard, NOAA Fisheries, or, depending on the particular element of the Strategy, both. Regardless, NOAA Fisheries will need to be a party to consultation on implementation of the Strategy itself. With regard to those agencies with maritime operations within the range of right whales, the Strategy anticipates that NOAA Fisheries will request consultation with each of these agencies. They include the NOAA Corps, U.S. Navy, U.S. Coast Guard, U.S. Army (and Army Corp of Engineers), Environmental Protection Agency, Minerals Management Service, Maritime Administration, and Military Sealift Command.

V. Continue Ongoing Protection Actions

- **Ongoing Activities.** NOAA Fisheries has a program to reduce ship strikes that has been ongoing over the last decade and has been expanded in recent years as ship strikes continue. But, this is a complex problem that requires additional, more proactive measures. Therefore, this Strategy is not intended to replace those efforts, but to enhance them. Continuation and support of these actions are an important element of the Strategy.

The ongoing activities include:

- aerial surveys notify mariners of right whale sighting locations,
- operation of the northeast US and southeast US mandatory ship reporting systems to provide information to mariners entering right whale habitat,
- support of Recovery Plan Implementation Teams that provide

- recommendations to NOAA Fisheries on recovery activities,
 - support of shipping industry liaisons, and
 - Endangered Species Act (ESA) section 7 consultations.
- **Technological developments.** There may be certain technological advances that aid in reducing the likelihood of ship strikes. Research is being done on several types of devices, but there is no known technological fix at this time. An element of the Strategy is to foster further research and development of such devices, and if a technology is *shown* to reduce the likelihood of ship strikes, then it should be considered for use by a given ship in lieu of complying with certain routing or speed restrictions. However, such advances may cause adverse biological affects. Therefore, any approved ship strike reducing technology must also meet legal and biological criteria identified by NOAA Fisheries (i.e., it does not adversely affect an endangered species, can be permitted for use, etc.).